

ABSTRACT

A shaping method and shaper use in a communication network to convert an incoming data flow (IN) with an incoming data packet rate (R-IN) into an outgoing data flow (OUT) with an adaptive outgoing data packet rate (R-OUT). The shaping method includes buffering with a buffer (BUF) of the shaper (S) data packets of the incoming data flow (IN) and generating thereby buffered data packets; and determining by a first determiner (DET1) of the shaper (S) a leaking time moment (P-rel) for a buffered data packet (P) of the buffered data packets. This leaking time moment (P-rel) is a time moment at which the buffered data packet (P) should be leaked by the buffer (BUF) and determines also thereby the adaptive outgoing data packet rate (R-OUT). Furthermore, is the step of determining the leaking time moment (P-rel) realized as a function of traffic contract parameters (PCR; MCR) that are related to the incoming data flow (IN). The method further includes a second determiner (DET2) receiving status information (STAT) from a marker (M) which is downstream coupled to the shaper (S); and determining by the second determiner (DET2) a conform time moment (P-conf) according to the status information (STAT) and according to a predefined drop priority. The conform time moment (P-conf) is a time moment at which, in the event of leaking the data packet (P) by the buffer at the conform time moment (P-conf), the buffered data packet (P) receives from the marker, upon reception, the predefined drop priority. Finally, the method comprises comparing by a comparing means (COMP) the conform time moment (P-conf) with the leaking time moment (P-rel) and in the event when the conform time moment (P-conf) is earlier than the leaking time moment (P-rel), constituting the leaking time moment (P-rel) with the value of the conform time moment (P-conf) in order to leak the buffered data packet (P) at that time moment.